

1/30

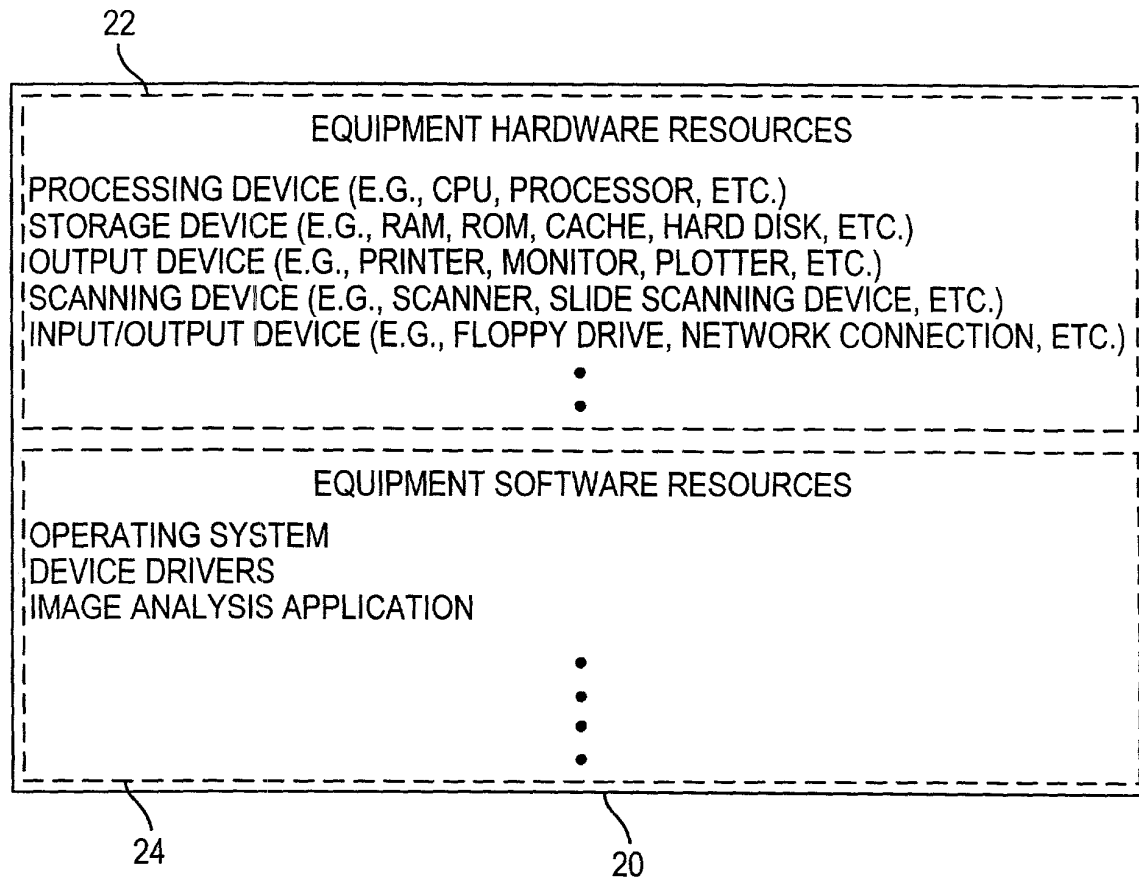


FIG. 1

2/30

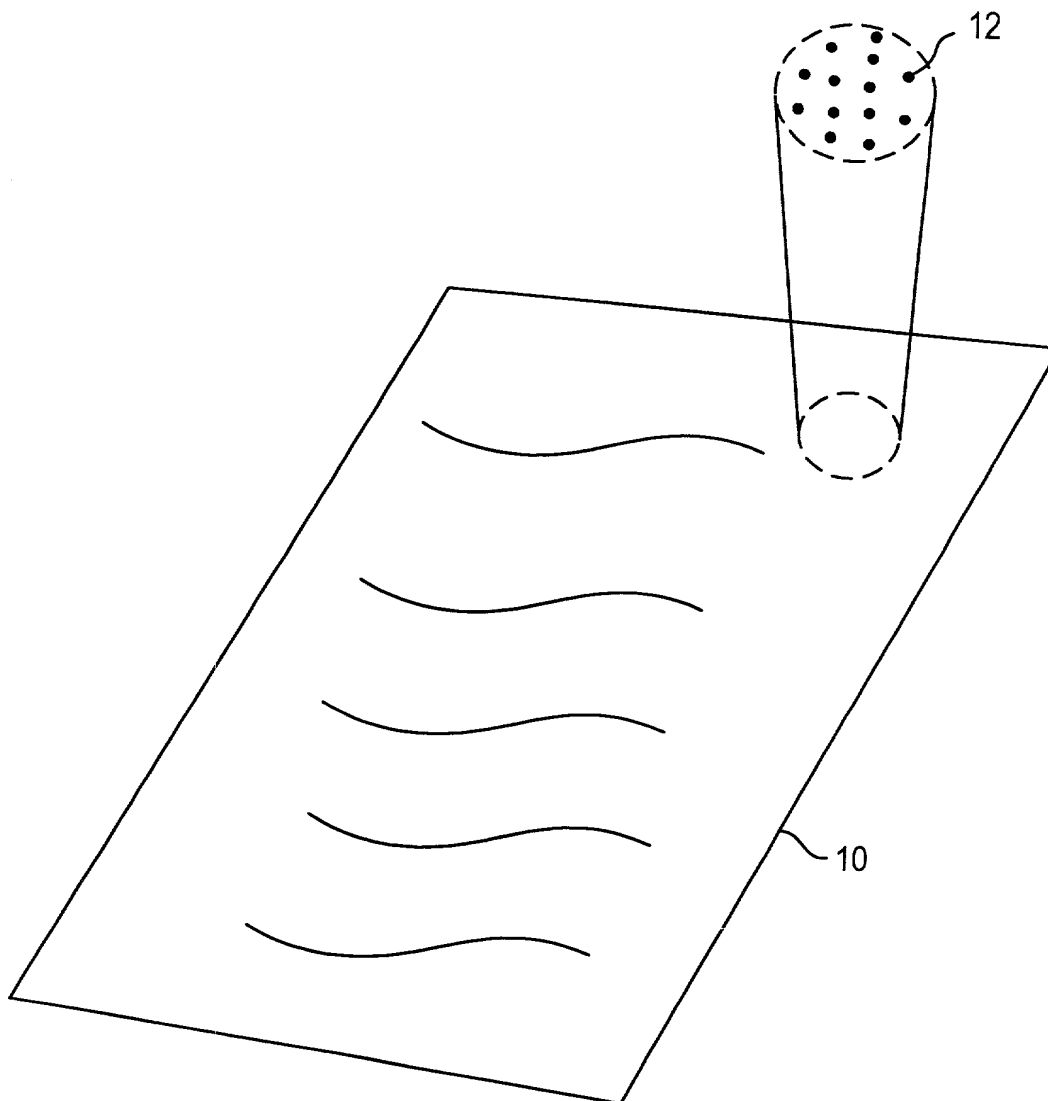
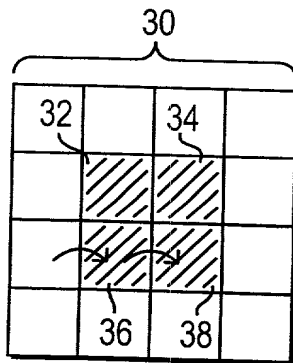
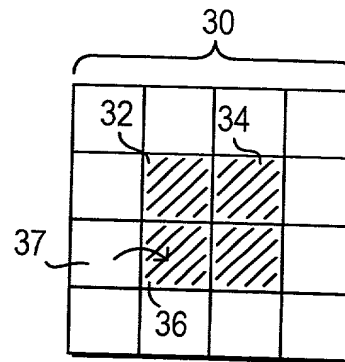
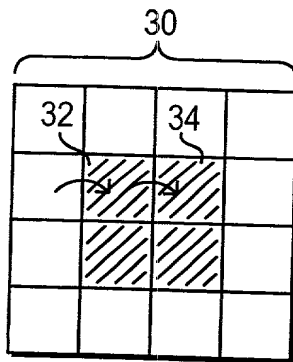
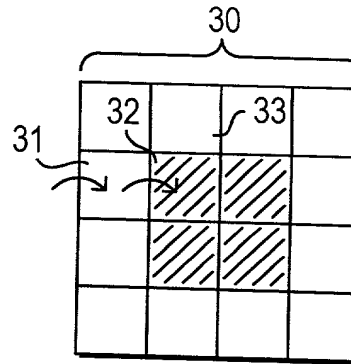
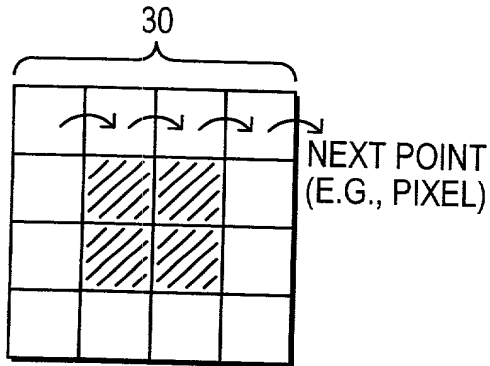


FIG. 2

3/30



4/30

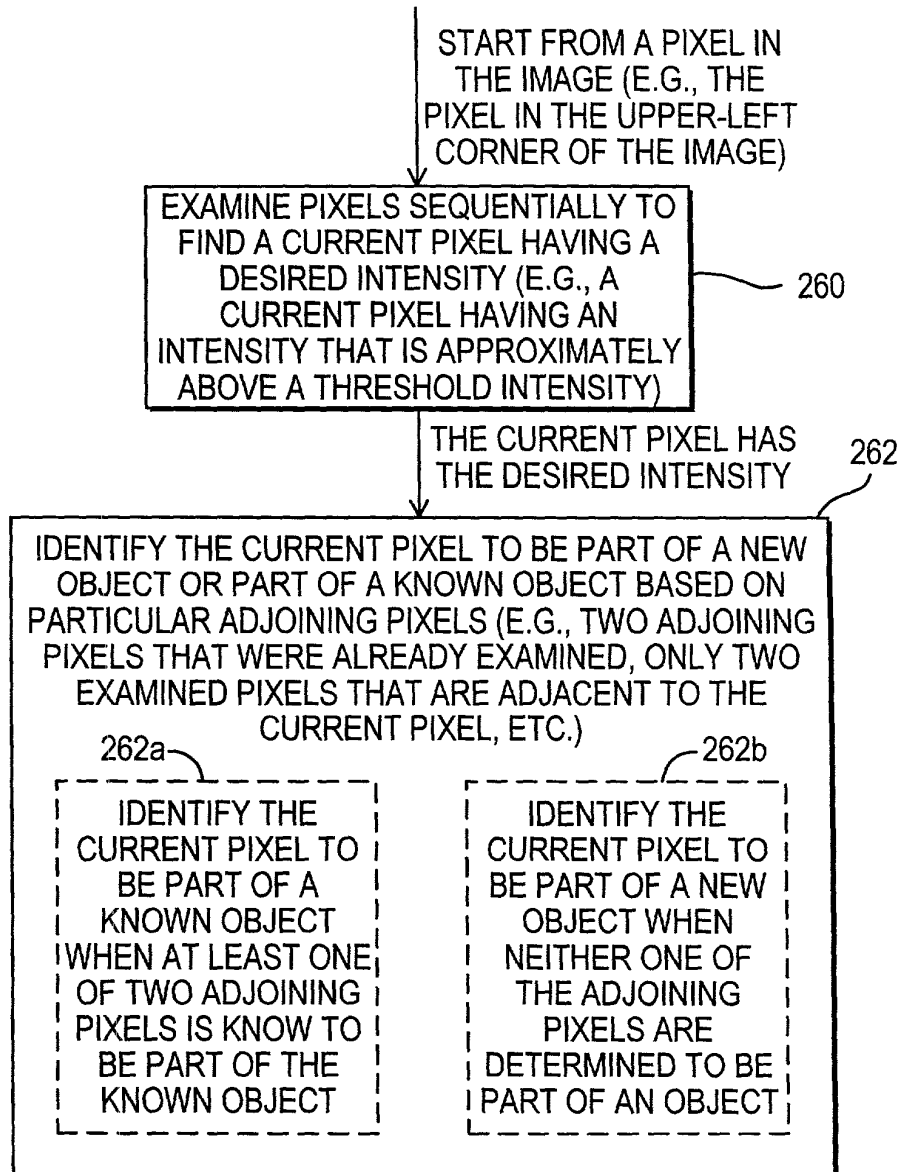
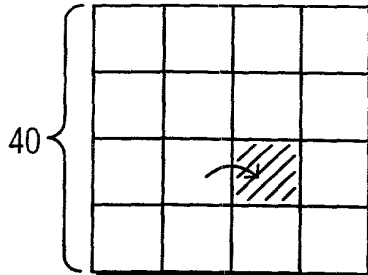


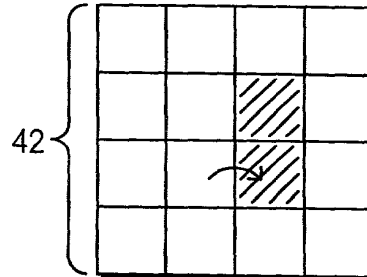
FIG. 3f

5/30



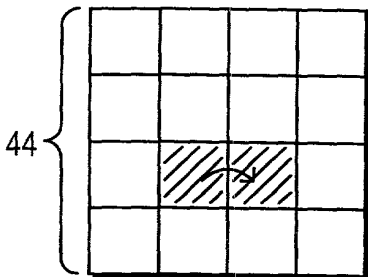
NEW SPOT

FIG. 4a



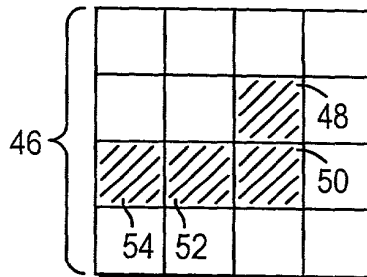
KNOWN SPOT

FIG. 4b



KNOWN SPOT

FIG. 4c



TWO KNOWN SPOTS

FIG. 4d

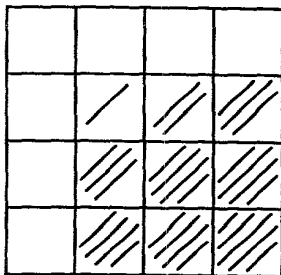


FIG. 4e

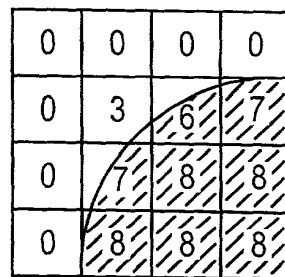


FIG. 4f

LIGHT INTENSITY RANGE

6/30

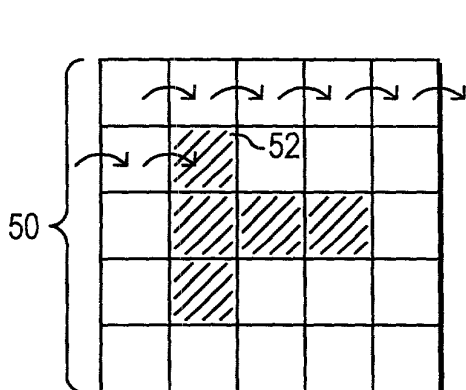


FIG. 5a

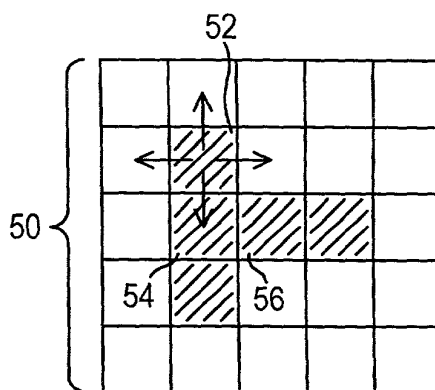


FIG. 5b

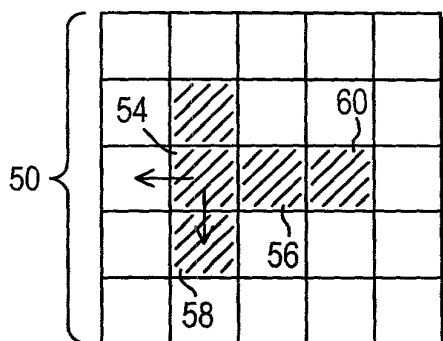


FIG. 5c

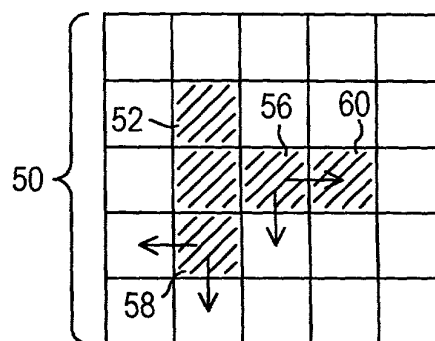


FIG. 5d

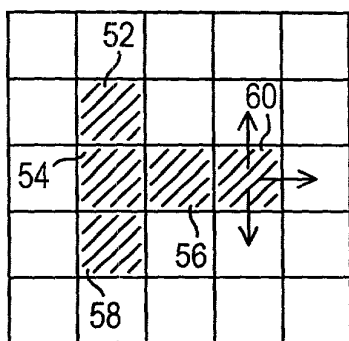


FIG. 5e

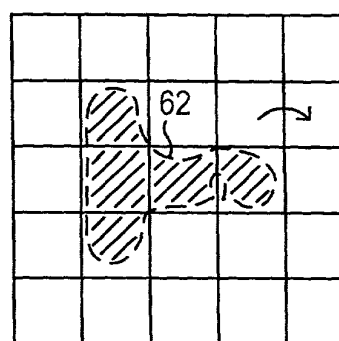


FIG. 5f

7/30

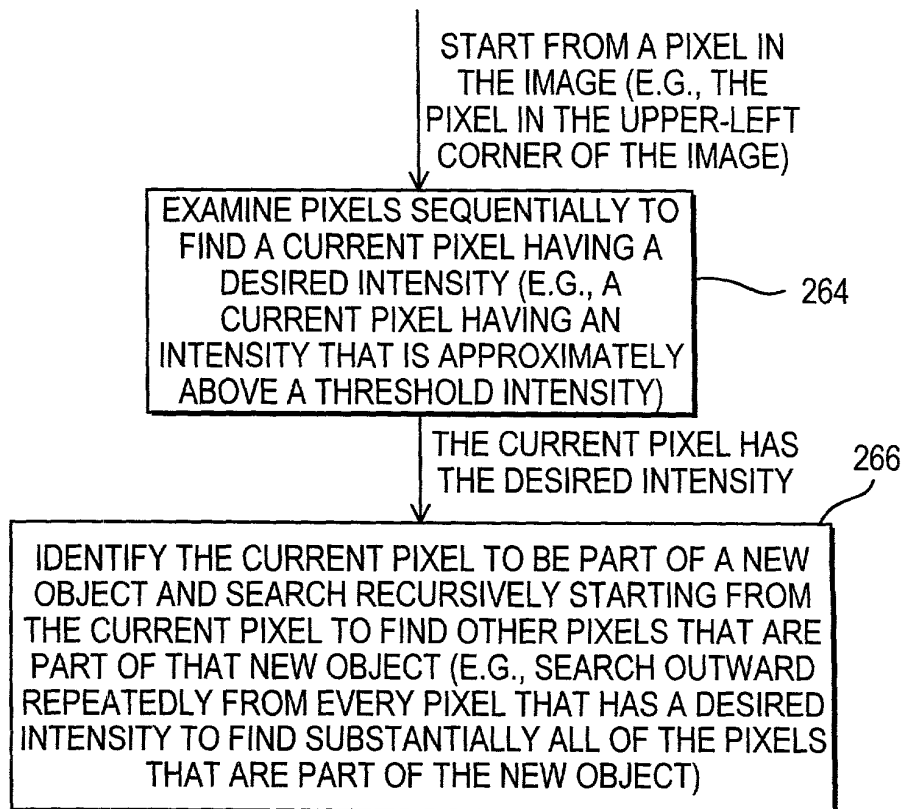
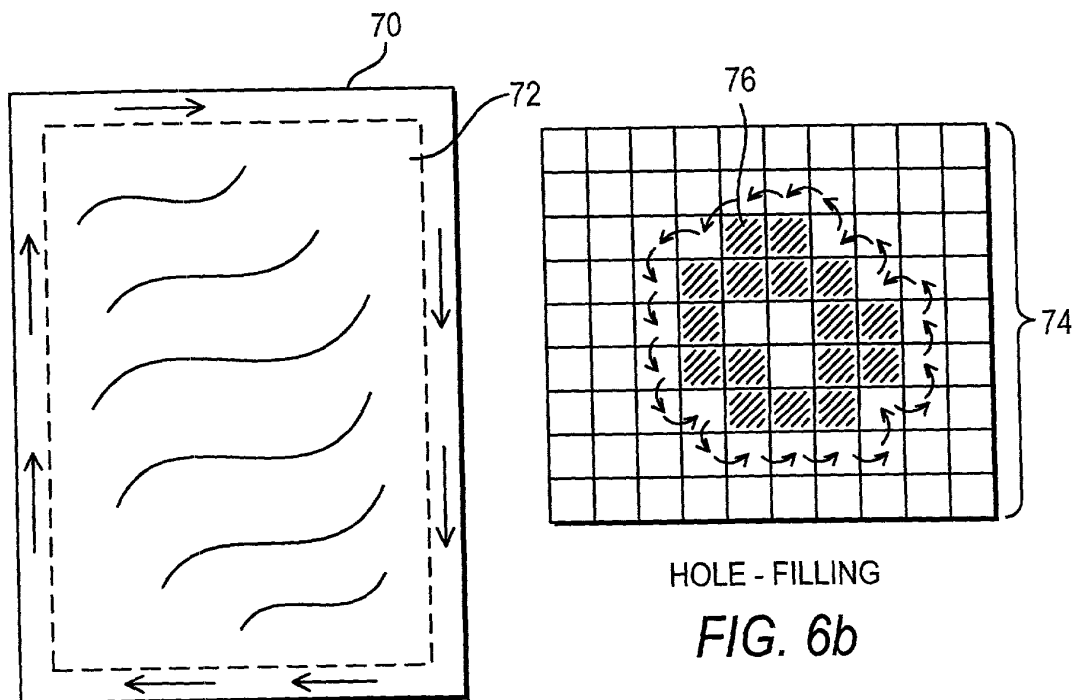


FIG. 5g

8/30



EDGE REJECTION

FIG. 6a

HOLE - FILLING

FIG. 6b

9/30

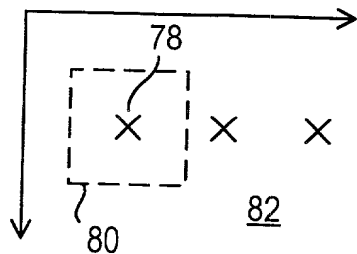


FIG. 7a

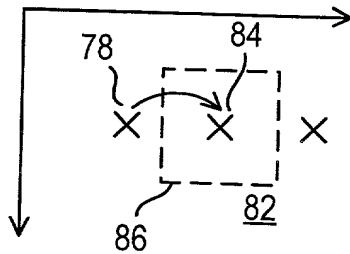


FIG. 7b

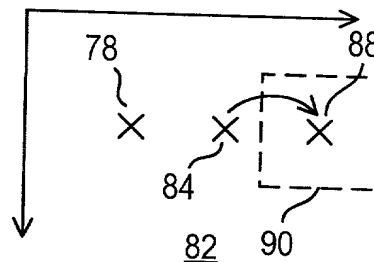


FIG. 7c

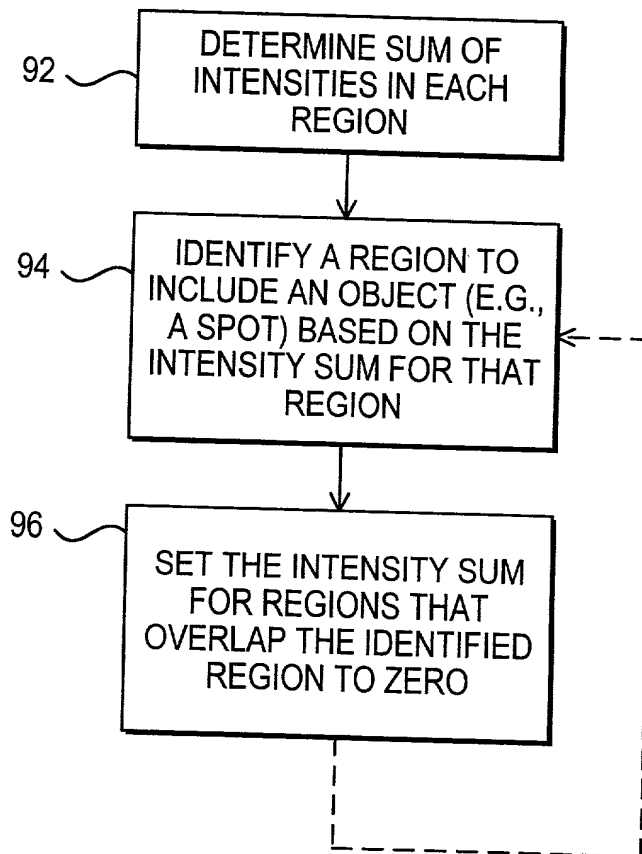


FIG. 8a

Applicants:

Cameron W. Tanner and Patrick D.

Tepesch

Docket No.:

COR-54/Serial No. 09/803,133

Filed:

March 9, 2001

For:

METHOD APPARATUS FOR

IMAGE ANALYSIS

Express Mail #

EK708045024US

10/30

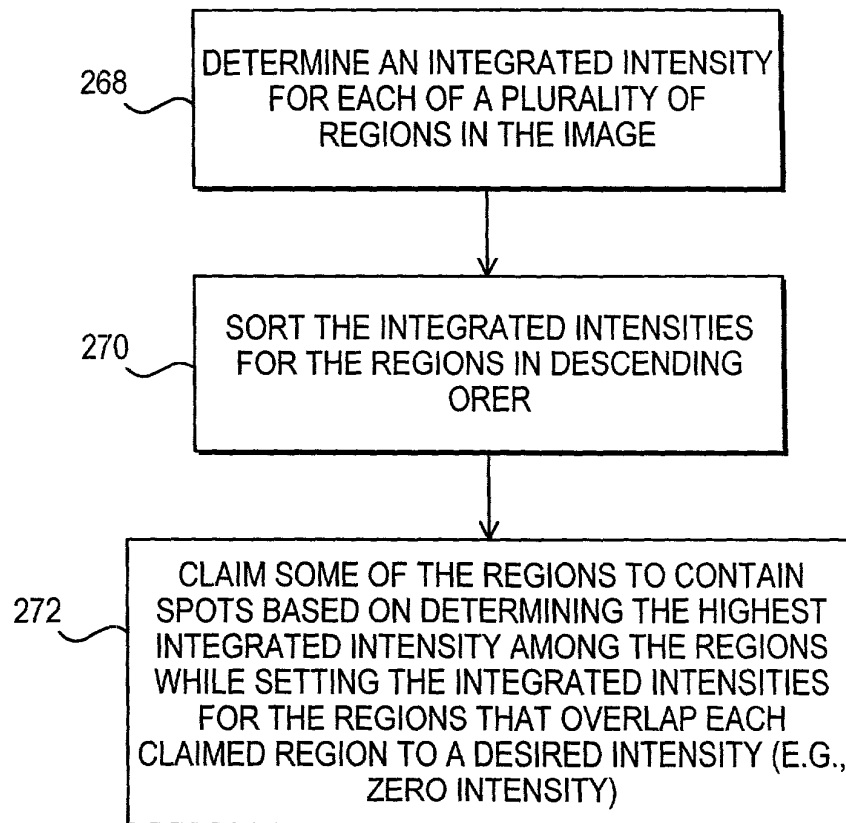


FIG. 8b

11/30

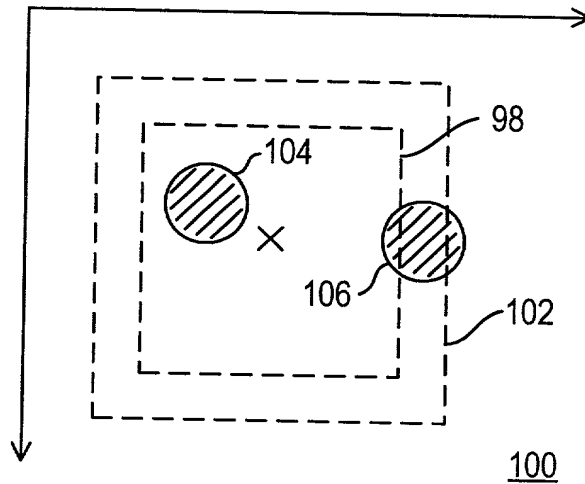


FIG. 9

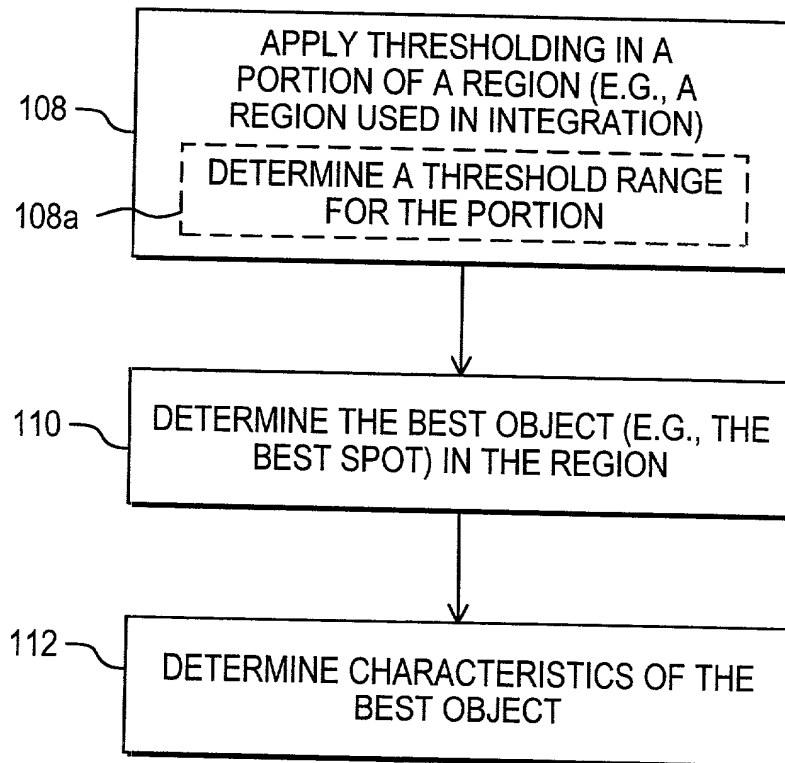


FIG. 10

12/30

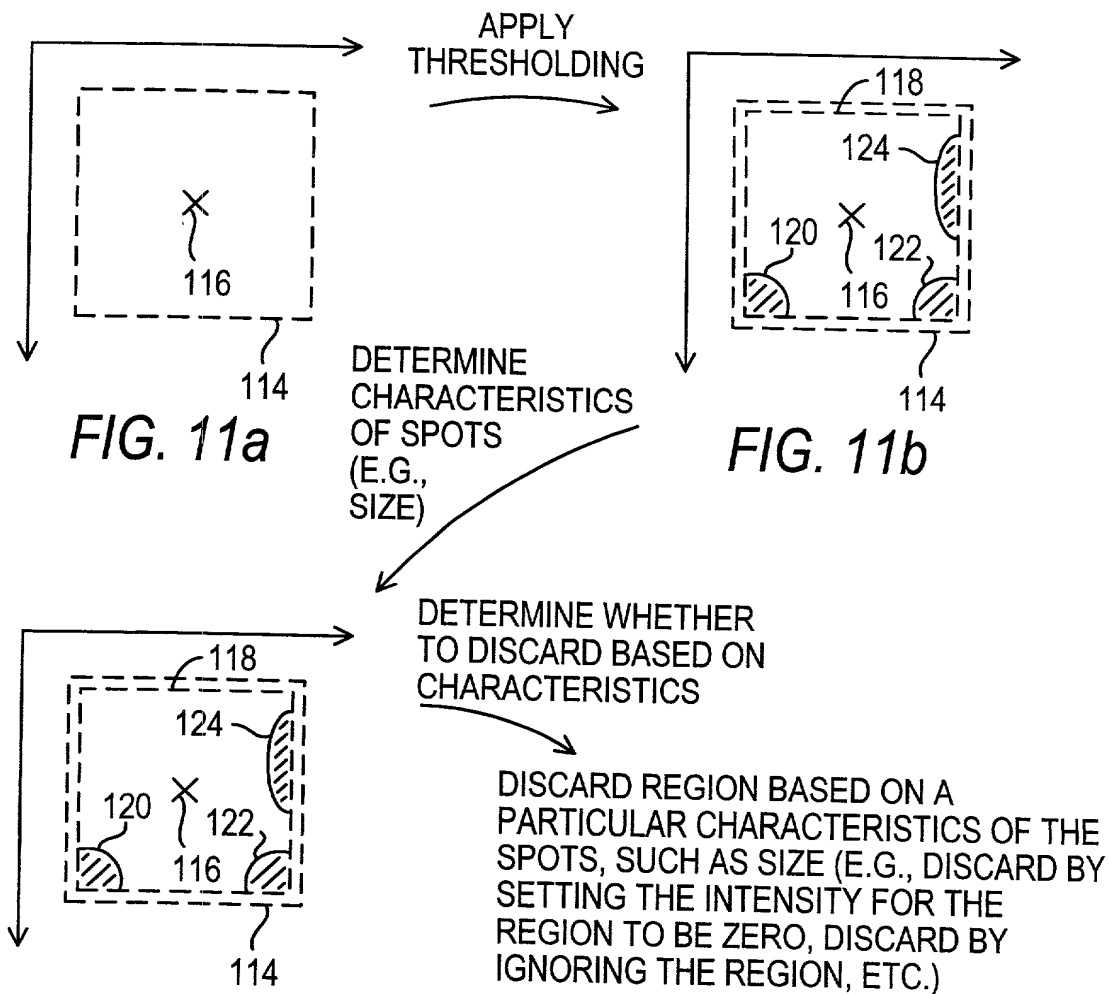


FIG. 11c

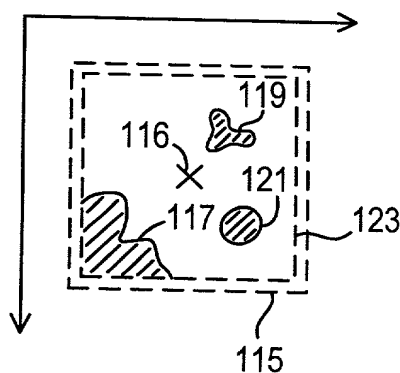
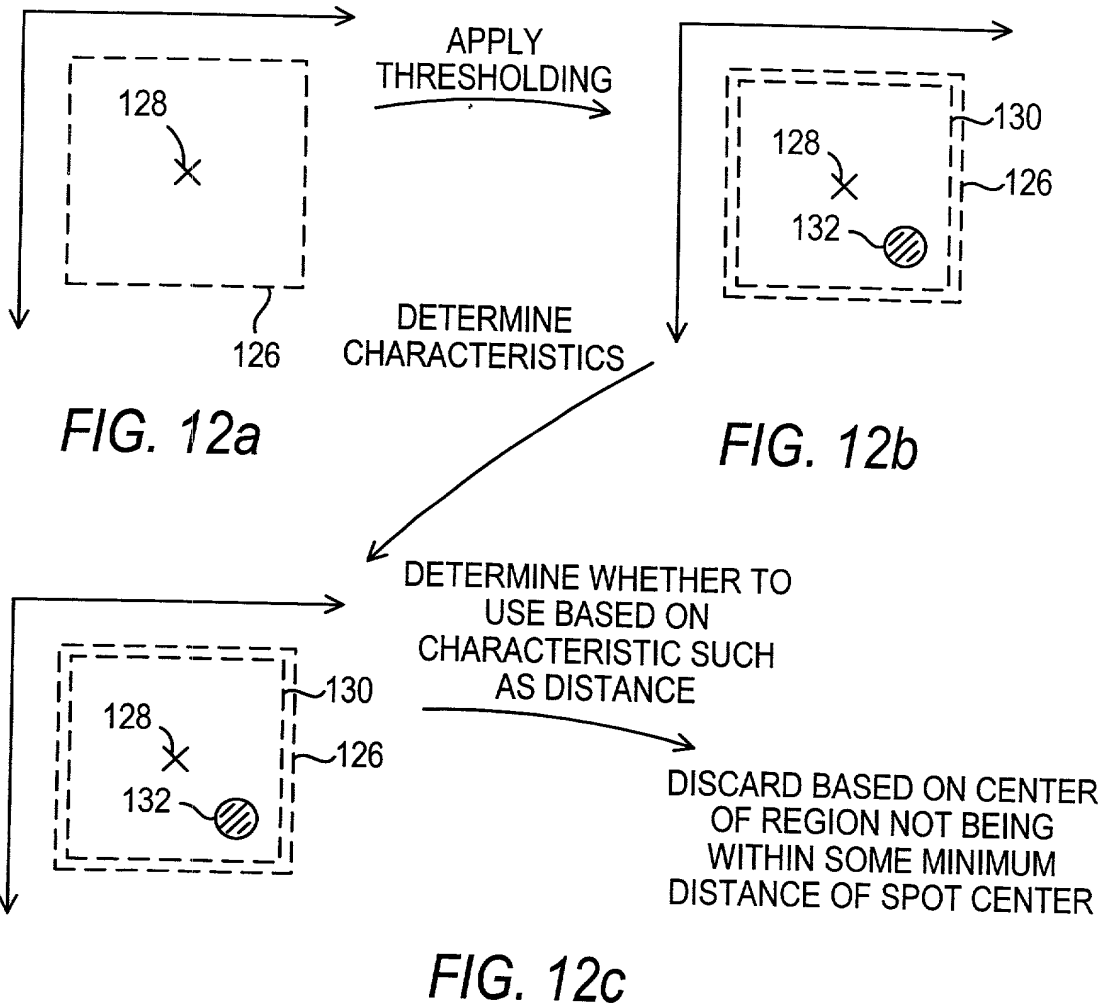


FIG. 11d

13/30



14/30

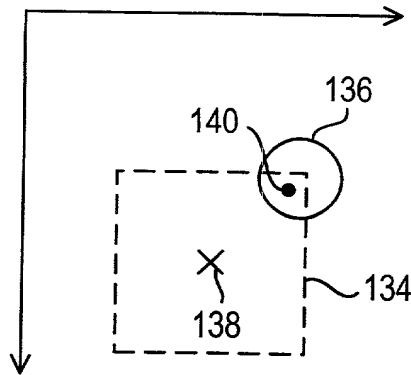


FIG. 13a

MOVE REGION TO BE CENTERED ON CALCULATED SPOT CENTER

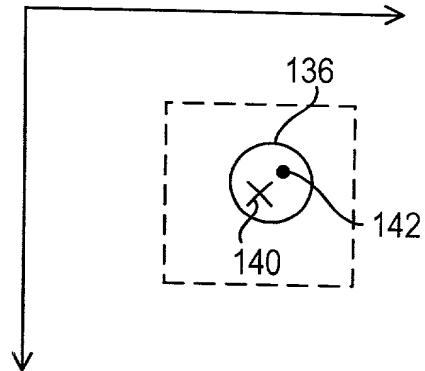


FIG. 13b

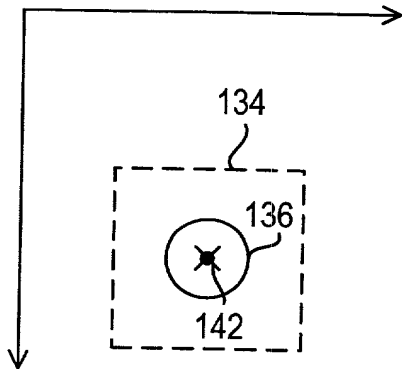


FIG. 13c

MOVE REGION TO BE CENTERED ON CALCULATED SPOT CENTER

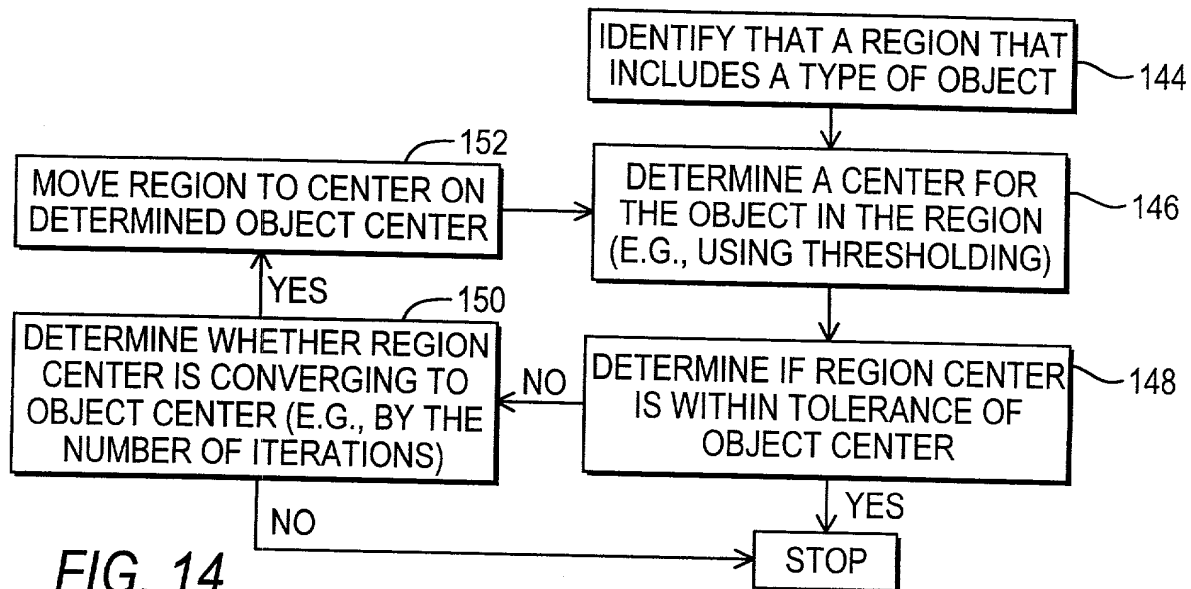


FIG. 14

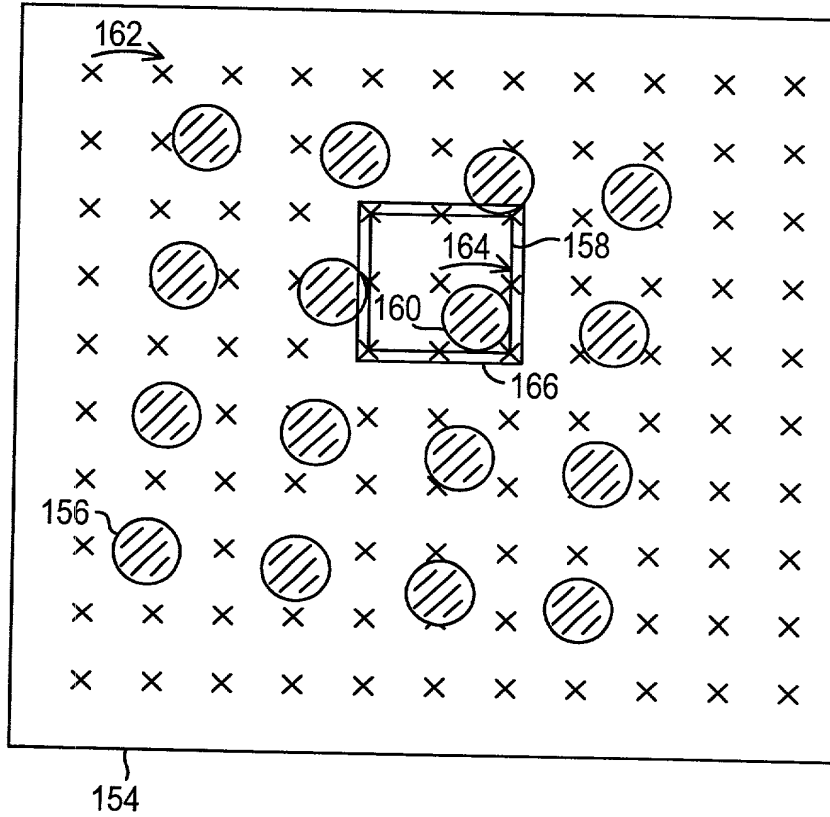


FIG. 15

Applicants:
Docket No
Filed
For:
Express Mail #.

Cameron W. Tanner and Patrick D.
Tepesch
COR-54/Serial No 09/803,133
March 9, 2001
METHOD APPARATUS FOR
IMAGE ANALYSIS
EK708045024US

16/30

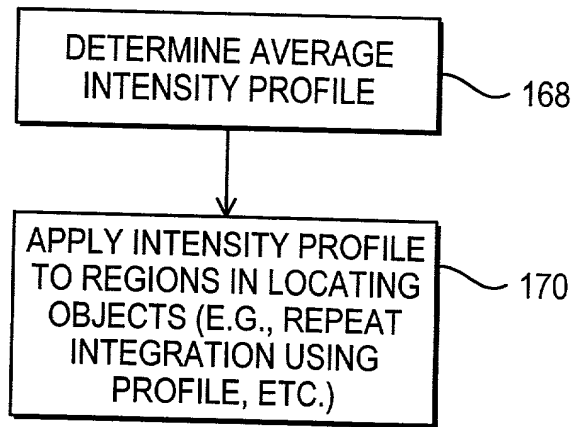


FIG. 16

17/30

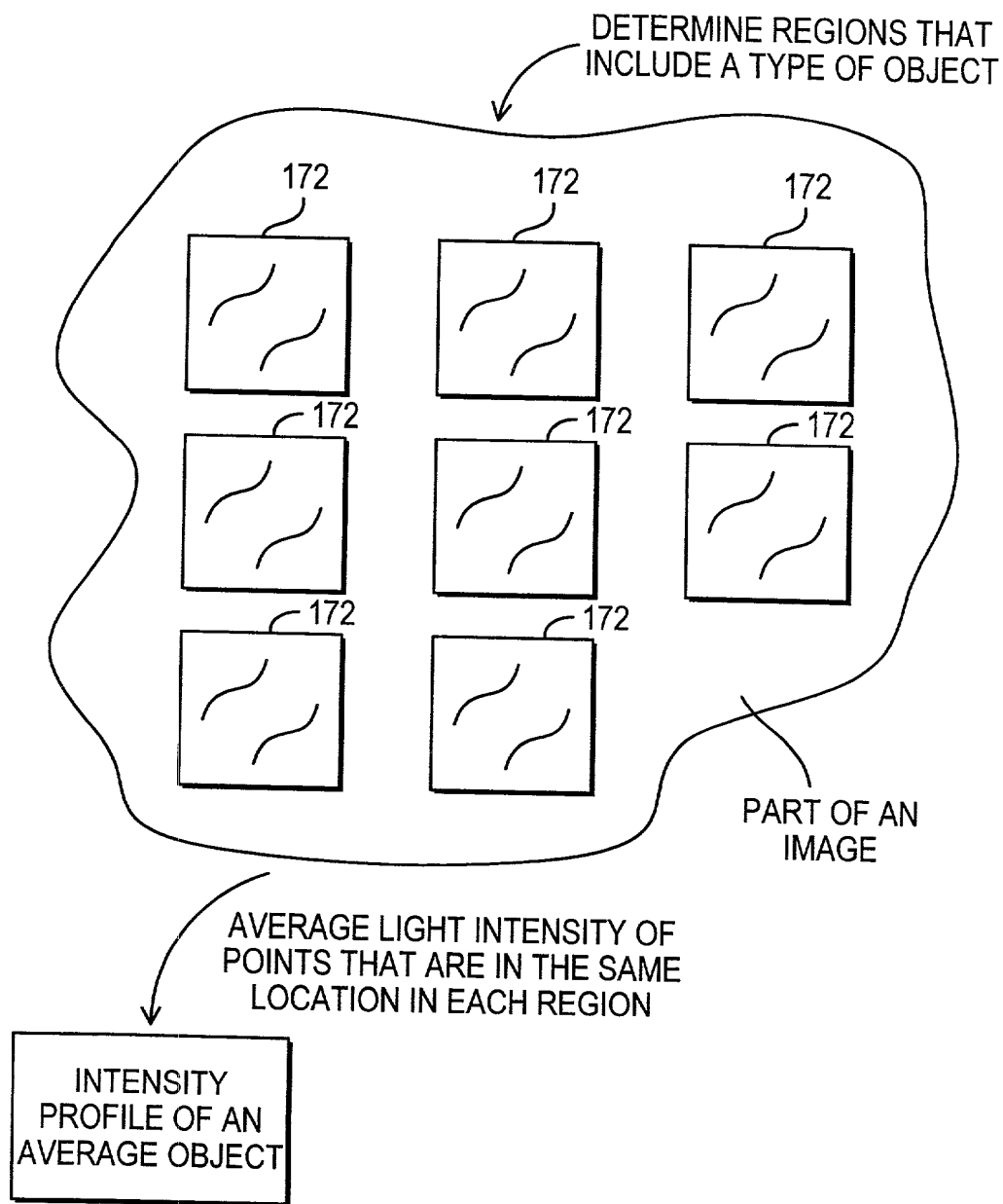


FIG. 17a

Cameron W. Tanner and Patrick D.

COR-54/Serial No 09/80

March 9, 2001

METHOD APPLIED

IMAGE ANALYSIS

EK708045024US

18/30

#11111111111111111111111111111111
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FIG. 17b

19/30

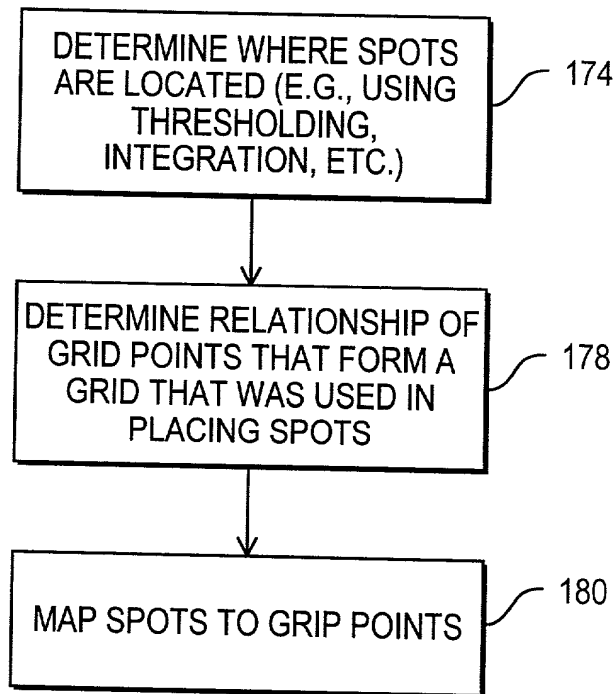
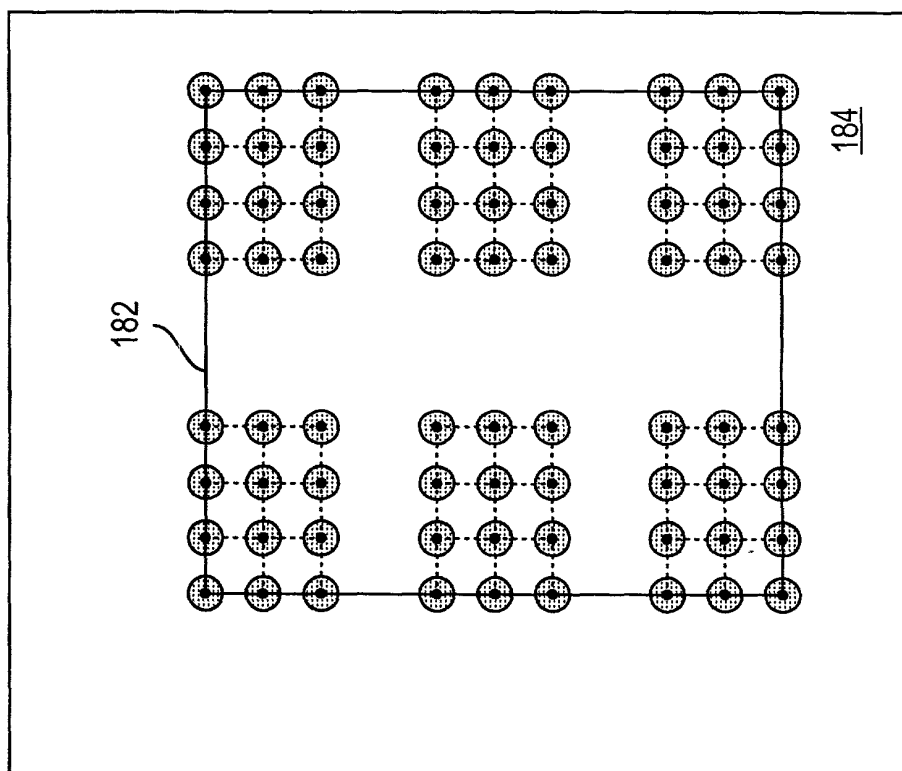
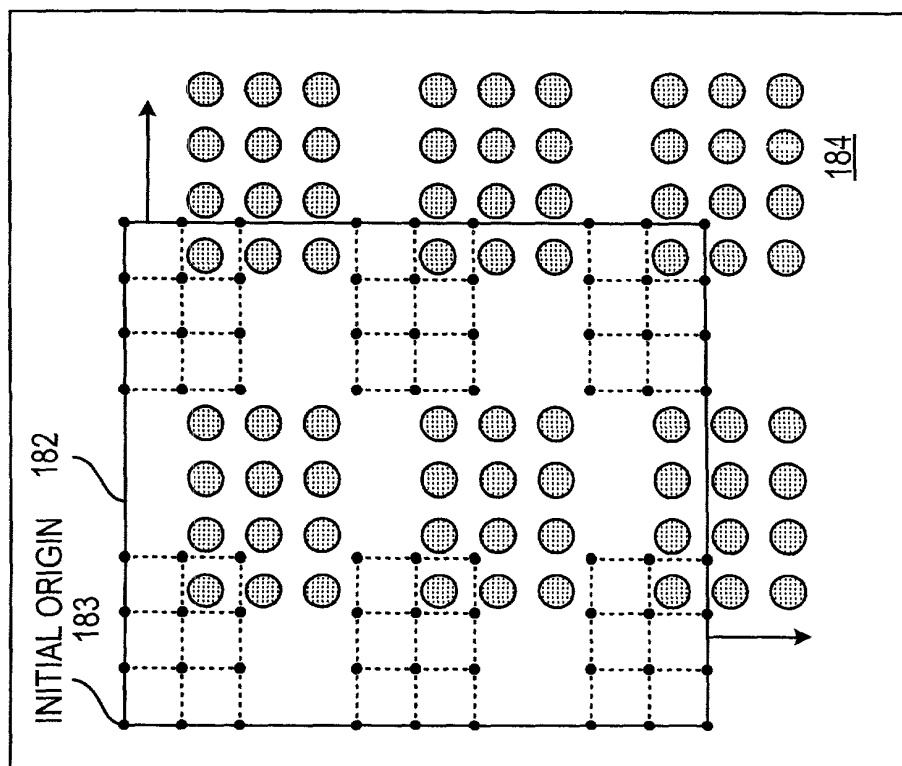


FIG. 18

20/30



BEST ORIGIN FOR GRID FOUND



MOVING GRID ON IMAGE

FIG. 19

21/30

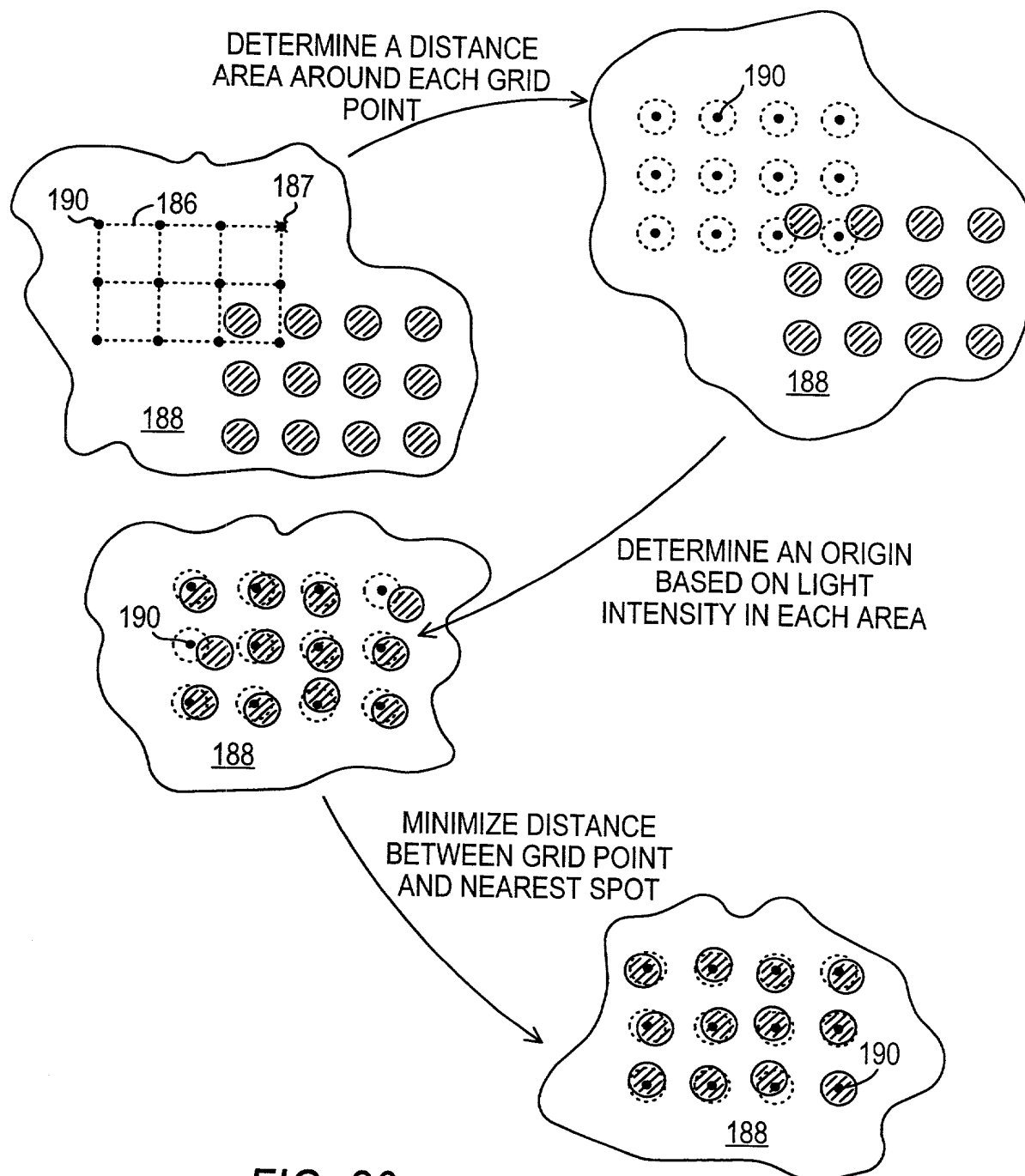
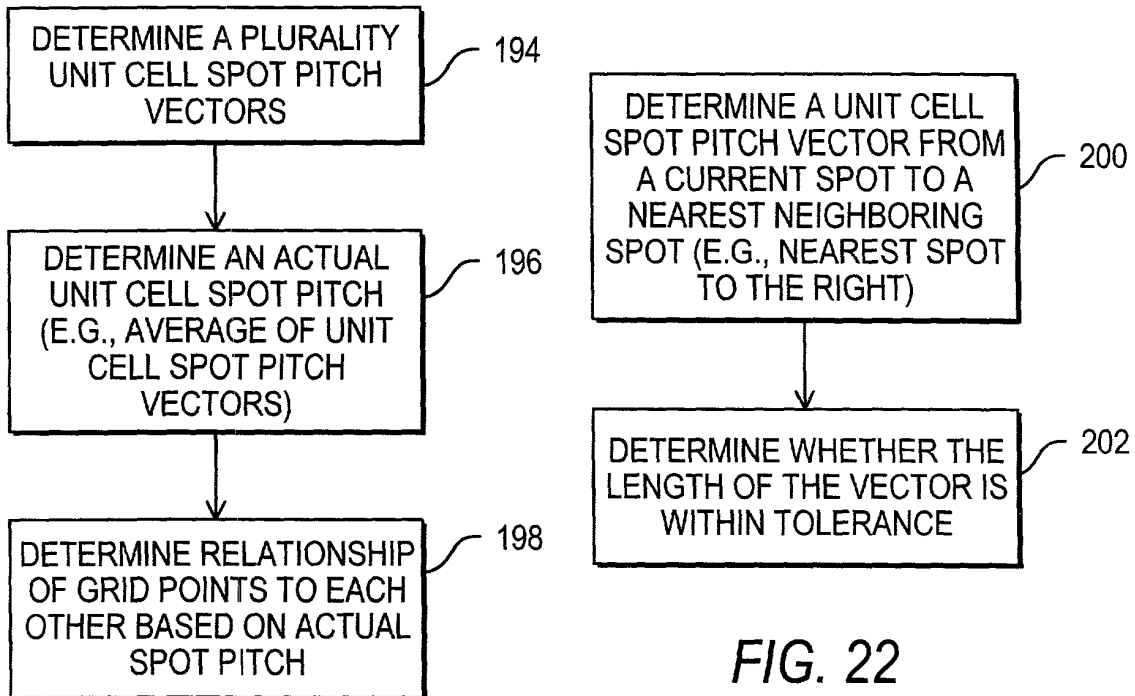


FIG. 20

22/30



23/30

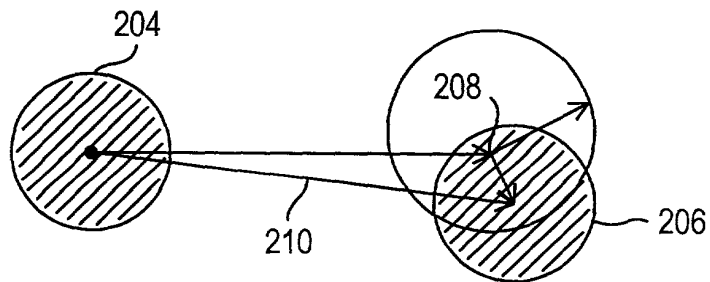
NEAREST NEIGHBOR WITHIN
TOLERANCE FOR SPOT PITCH VECTOR

FIG. 23a

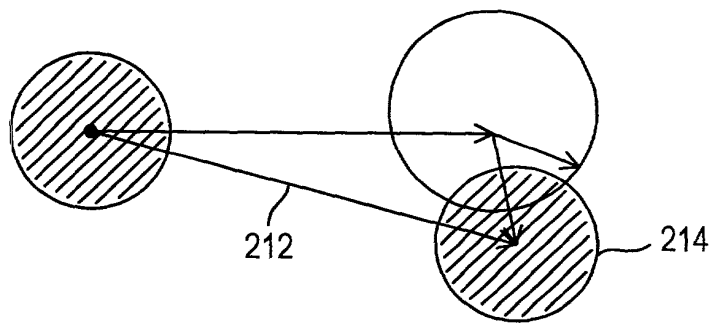
NEAREST NEIGHBOR NOT WITHIN
TOLERANCE FOR SPOT PITCH VECTOR

FIG. 23b

Applicants:

Cameron W. Tanner and Patrick D.

Tepesch

Docket No

COR-54/Serial No 09/803,133

Filed

March 9, 2001

For

METHOD APPARATUS FOR

IMAGE ANALYSIS

Express Mail #

EK708045024US

24/30

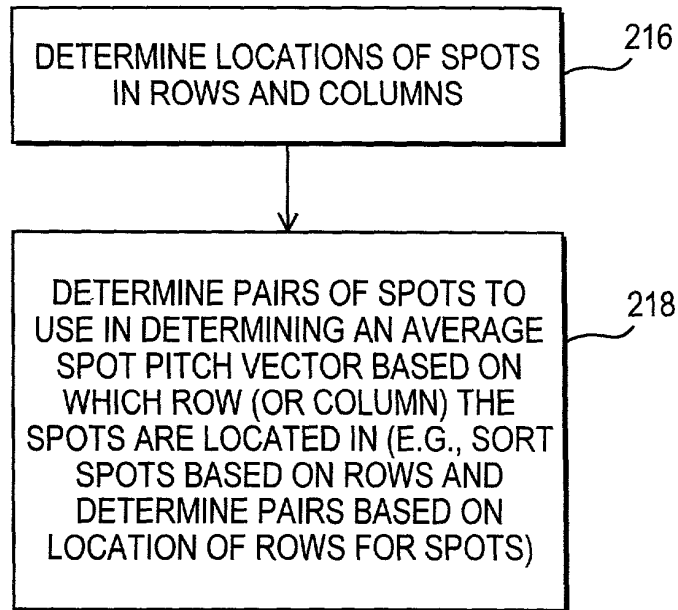


FIG. 24

25/30

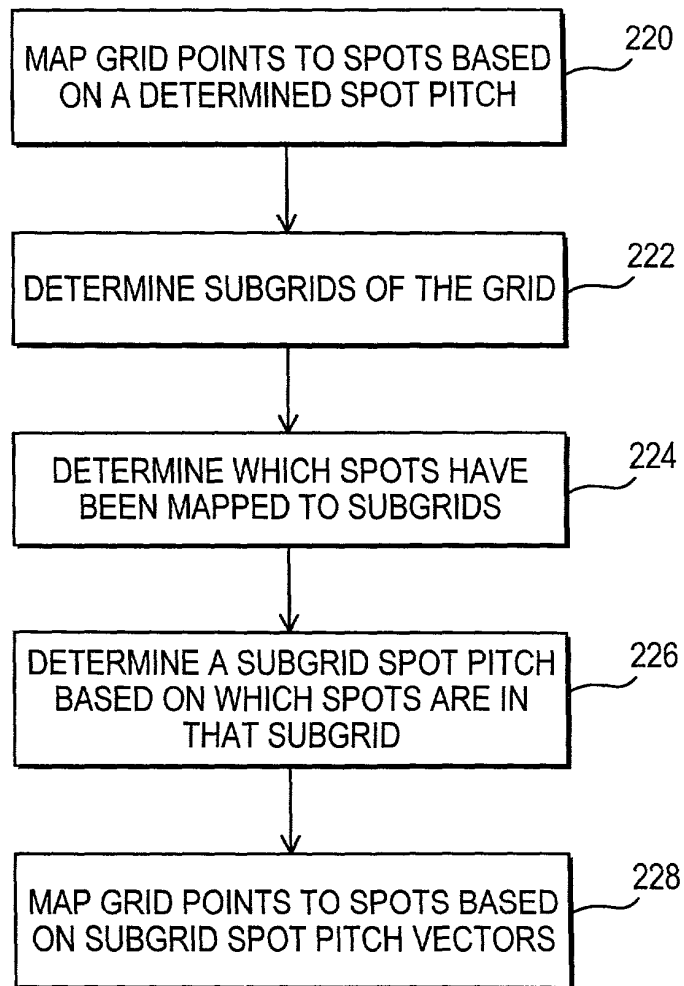


FIG. 25

26/30

230
PROVIDE A SLIDE HAVING A HIGH DENSITY ARRAY OF SPOTS THAT INCLUDES MATERIALS FROM A PLURALITY OF SOURCES (E.G., CANCEROUS AND NONCANCEROUS TISSUE WITH A DIFFERENT FLUORESCENT TAG FOR EACH)

232
GENERATE IMAGES BASED ON THE SLIDE (E.G., A DIFFERENT IMAGE BASED ON CHARACTERISTICS OF EACH FLUORESCENT TAG) AND LOCATE SPOTS IN EACH IMAGE

234
ALIGN IMAGES BASED ON LOCATION OF SPOTS (E.G., USING A MATRIX TRANSFORM)

FIG. 26a

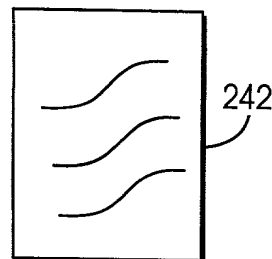


FIG. 27a

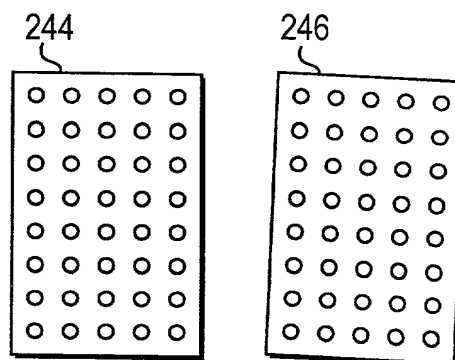


FIG. 27b

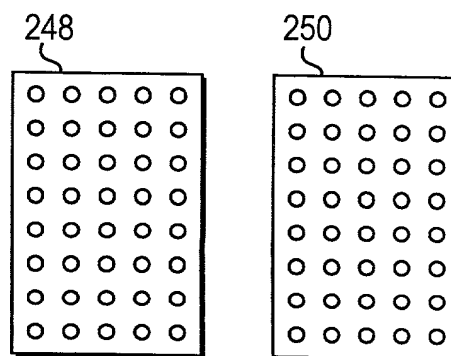


FIG. 27c

27/30

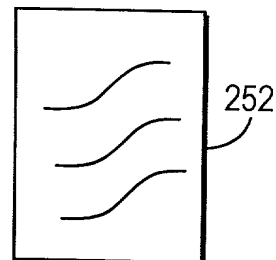
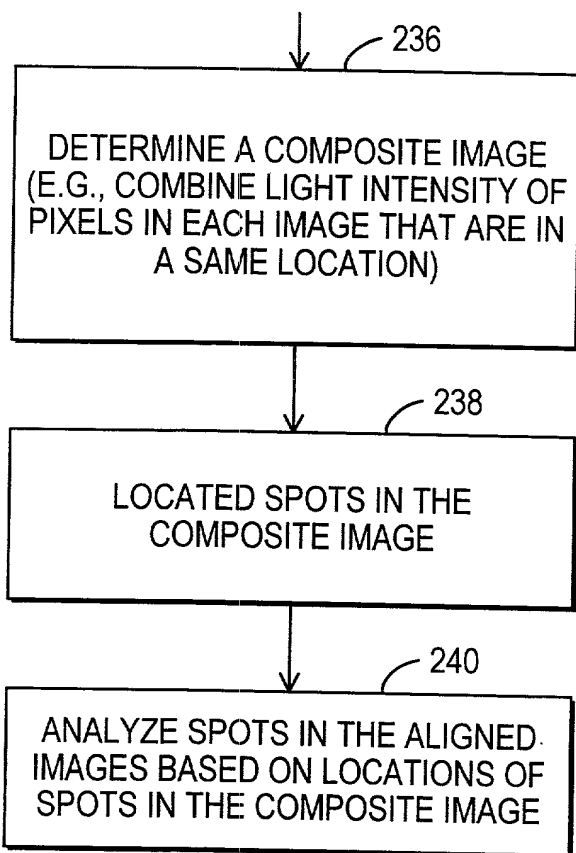


FIG. 27d

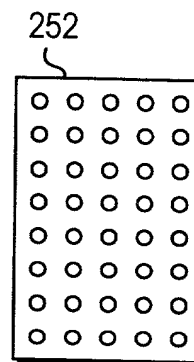


FIG. 27e

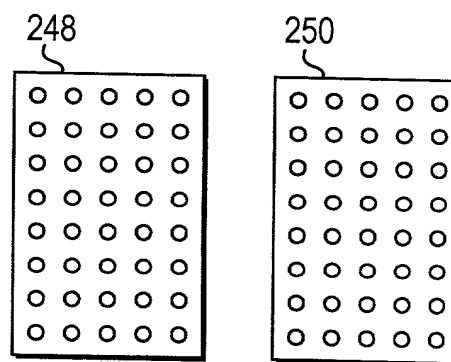


FIG. 27f

28/30

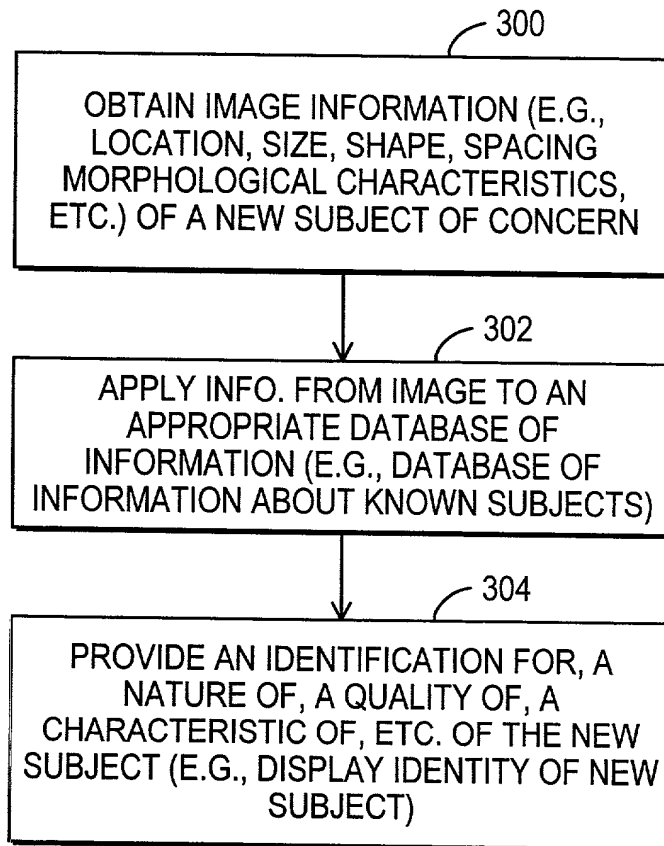


FIG. 28

Applicants:
Pat No
For
Express Mail #

Cameron W. Tanner and Patrick D.
Tepesch
COR-54/Serial No 09/803,133
March 9, 2001
METHOD APPARATUS FOR
IMAGE ANALYSIS
EK708045024US

29/30

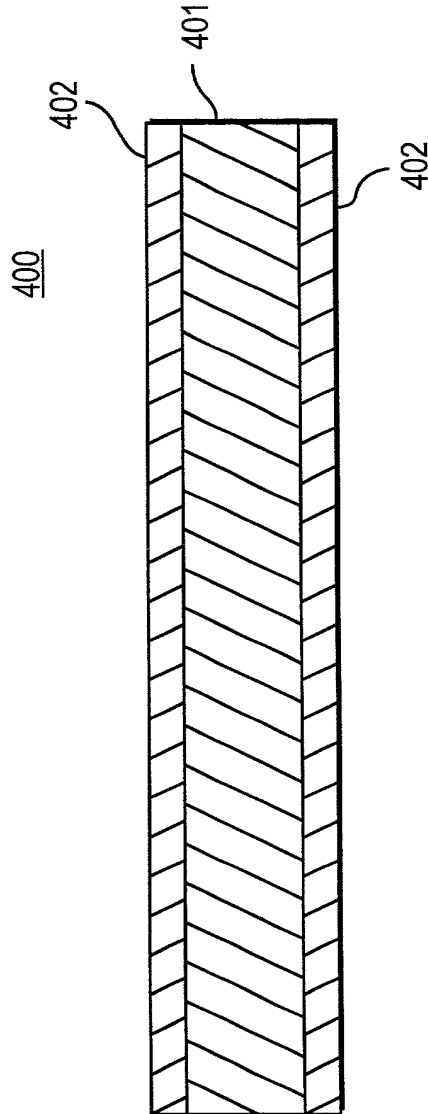


FIG. 29

Applicants:
Docket No.:
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For
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Cameron W. Tanner and Patrick D.
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COR-54/Serial No.: 09/803,133
March 9, 2001
METHOD APPARATUS FOR
IMAGE ANALYSIS
BK708045024US

30/30

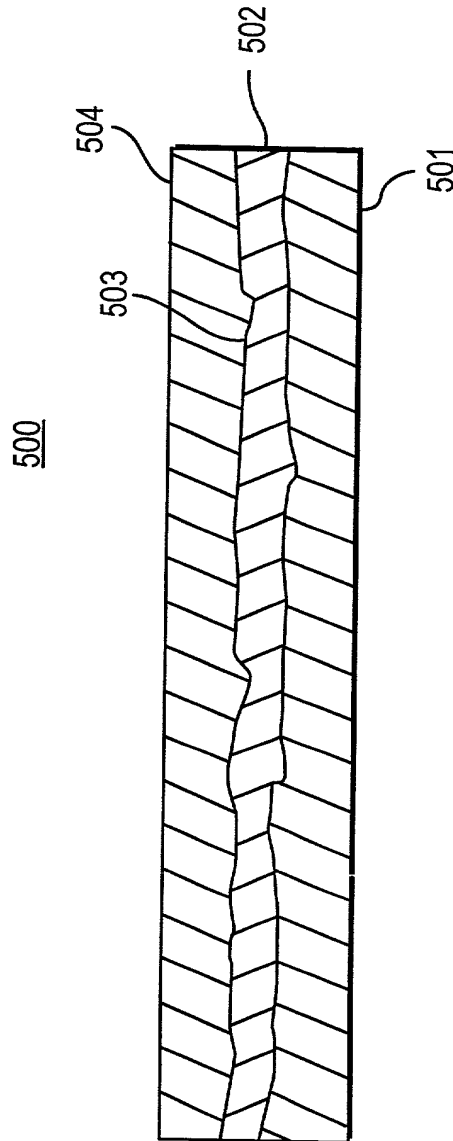


FIG. 30